

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A flexible electrical heating unit, having a heating device (10) with a flexible support and ~~[[a]]~~ an inserted heating cord ~~inserted therein~~, at least one control member (12) for a heating current (iH) arranged in at least one heating circuit (17) and a triggering circuit (20) acting ~~thereon~~;

~~characterized in that~~ on the at least one heating circuit (17), the flexible electrical heating unit comprising:

the triggering circuit (20) ~~[[has]]~~ having a time control circuit (21)~~[[,]]~~ by ~~means of~~ which a heating output ~~can be~~ is one of controlled ~~[[or]]~~ and regulated ~~which~~, for generating a starting temperature at a ~~[[the]]~~ surface of the support during a preset initial length of time, a heating output~~[[,]]~~ which is increased in comparison with a subsequent continuous operating phase determined by a reference variable in accordance with an increased reference variable ~~can be~~ one of controlled ~~[[or]]~~ and regulated, and one of while during ~~[[the]]~~ a continuous operating phase ~~at most one~~ a heating output permissible also for unmonitored operation ~~[[is]]~~ set for causing a lower surface temperature of the support than during ~~[[the]]~~ an initial phase, ~~or wherein~~ and a switch-off of the heating current (iH) takes place after the initial length of time.

Based Upon: PCT/EP2004/005244

2. (Currently Amended) The heating unit in accordance with claim 1, wherein ~~characterized in that~~ the triggering circuit (20) ~~is designed in such a way that the~~ has at least one of a size and/or and a length of ~~[[the]]~~ increased heating output during ~~the length of the~~ a starting phase Delta ta and is one of controlled and ~~[[or]]~~ regulated as a function of a heating output manually selected for the continuous heating phase.

3. (Currently Amended) The heating unit in accordance with claim ~~[[1 or]]~~ 2, wherein ~~characterized in that~~ the time control circuit (21) ~~has been embodied in such a way that it acts by means of~~ an output signal on an output-actuating circuit (25) arranged in the triggering circuit (20), ~~by means of which~~ for triggering the control member (12) ~~can be triggered~~.

4. (Currently Amended) The heating unit in accordance with claim 3, wherein ~~characterized in that~~ a reference variable ~~can be~~ is superimposed on the output signal of the time control circuit (21) by ~~means of~~ charging ~~[[it]]~~ with a reference variable (26.1).

Based Upon: PCT/EP2004/005244

5. (Currently Amended) The heating unit in accordance with ~~one of the preceding claims, characterized in that~~ claim 4, wherein the triggering circuit (20) has an insulation monitoring stage (11.1) for an insulation located between the heating wires contained in the heating cord, at least one of a monitoring stage (23) for ~~[[the]]~~ an interior temperature of the housing~~[[, or]]~~ and a limiting stage (24), ~~or a combination of at least two of these stages, and the triggering circuit is embodied in such a way that the~~ limits at least one of an amount ~~and/or~~ and a length of the generated heating output caused by influence of the time control circuit (21) ~~is limited in case of~~ if one of a faulty status is discovered in at least one of the stages~~[[, or]]~~ and the heating output is completely shut down.

6. (Currently Amended) The heating unit in accordance with claim 5, wherein ~~characterized in that~~ a further control member (13), ~~which can be triggered~~ triggerable by the triggering circuit (20)~~[[,]]~~ is arranged in the heating circuit (17) and is triggered in case of a faulty state to one of limit, reduce ~~[[or]]~~ and shut off the heating current (iH).

Based Upon: PCT/EP2004/005244

7. (Currently Amended) The heating unit in accordance with claim 6, wherein ~~characterized in that~~ at least one output signal of the stages (11.1, 23, 24) ~~is used for triggering~~ triggers the further control member (13).

8. (Currently Amended) The heating unit in accordance with ~~one of claims 5 to claim 7, wherein~~ characterized in that the triggering circuit (20) is ~~embodied in such a way that the, or a further,~~ output signal of the time control circuit (21) is supplied to at least one stage (11.1, 23, 24), and one of the at least one stage (11, 23, 24) ~~is embodied in such a way that, as in an abnormal state~~ [[, it]] acts on at least one of the control member (12) ~~and/or~~ and the further control member (13), for limiting, reducing or interrupting the heating current (iH), ~~[[or]]~~ and the triggering circuit (20) is ~~embodied in such a way that the, or the further,~~ output signal is applied directly to the further control member (13) for one of limiting, reducing ~~[[or]]~~ and interrupting the heating current (iH).

Based Upon: PCT/EP2004/005244

9. (Currently Amended) The heating unit in accordance with ~~one of claims 5 to claim 7, wherein characterized in that~~ at least one stage (11.1, 23, 24) is connected with an output to an input of the time control circuit (21), and ~~the time control circuit (21) is embodied in such a way that~~ upon receipt of an output signal from the stage (11.1, 23, 24) ~~[[it]]~~ the time control circuit (21) emits an output signal for one of limiting, reducing ~~[[or]]~~ and interrupting the heating current (iH).

10. (Currently Amended) The heating unit in accordance with ~~one of the preceding claims, characterized in that~~ claim 9, wherein for switching off the electrical supply voltage~~[[,]]~~ the time control circuit (21) is brought into an active electrical connection with one of a switch (30) of the energy supply device (33, 32) of the heating unit~~[[,]]~~ with one of the triggering circuit (20)~~[[, or]]~~ and a component of the triggering circuit (20) ~~latter, [[or]]~~ and directly with the further control member (13).

Based Upon: PCT/EP2004/005244

11. (Currently Amended) The heating unit in accordance with ~~one of the preceding claims, characterized in that the~~ claim 10, wherein progressions of the heating output for affecting the surface temperature ~~[[in]]~~ with respect to at least one of a size and/or and a length are stored in a memory as a function of one of a manually selected output stage ~~[[or]]~~ and a type of operating application, and can ~~be called up for controlling~~ control and ~~adjust~~ adjusting the heating output.

12. (Currently Amended) The heating unit in accordance with claim 11, wherein ~~characterized in that~~ further progressions are stored ~~in the memory~~ in connection with an output stage change-over during an operating phase, and ~~can~~ be are called up as a result of the change-over.

13. (Currently Amended) The heating unit in accordance with ~~one of the preceding claims, characterized in that~~ claim 12, wherein the time control circuit (21) is connected with an indicator device (21.1) for ~~[[the]]~~ a status of at least one of the time control circuit ~~and/or and~~ the device functions.

Based Upon: PCT/EP2004/005244

14. (Currently Amended) The heating unit in accordance with ~~one of the preceding claims, characterized in that~~ claim 13, wherein in a parallel branch (17.2), ~~which is~~ located parallel with a control branch (17.1) of the heating circuit (17) having the at least one control member (12), a higher order safety shut-off device (14) ~~is provided for shutting~~ shuts off the heating unit in ~~case~~ an event of a dangerous situation.

15. (Currently Amended) The heating unit in accordance with ~~one of the preceding claims, characterized in that~~ claim 14, wherein the heating cord is constructed ~~in such a way~~ so that a safety shut-off takes place in case of an excess temperature.

16. (New) The heating unit in accordance with claim 1, wherein the time control circuit (21) acts by an output signal on an output-actuating circuit (25) arranged in the triggering circuit (20) for triggering the control member (12).

Based Upon: PCT/EP2004/005244

17. (New) The heating unit in accordance with claim 1, wherein the triggering circuit (20) has an insulation monitoring stage (11.1) for an insulation located between the heating wires contained in the heating cord, at least one of a monitoring stage (23) for an interior temperature of the housing and a limiting stage (24), and the triggering circuit limits at least one of an amount and a length of the generated heating output caused by influence of the time control circuit (21) if one of a faulty status is discovered in at least one of the stages and the heating output is completely shut down.

18. (New) The heating unit in accordance with claim 5, wherein the triggering circuit (20) is such that the output signal of the time control circuit (21) is supplied to at least one stage (11.1, 23, 24), and one of the at least one stage (11, 23, 24) in an abnormal state acts on at least one of the control member (12) and the further control member (13), for limiting, reducing or interrupting the heating current (i_H), and the triggering circuit (20) is such that the output signal is applied directly to the further control member (13) for one of limiting, reducing and interrupting the heating current (i_H).

Based Upon: PCT/EP2004/005244

19. (New) The heating unit in accordance with claim 5, wherein at least one stage (11.1, 23, 24) is connected with an output to an input of the time control circuit (21), and upon receipt of an output signal from the stage (11.1, 23, 24) the time control circuit (21) emits an output signal for one of limiting, reducing and interrupting the heating current (iH).

20. (New) The heating unit in accordance with claim 1, wherein for switching off the electrical supply voltage the time control circuit (21) is brought into an active electrical connection with one of a switch (30) of an energy supply device (33, 32) of the heating unit with one of the triggering circuit (20) and a component of the triggering circuit (20), and directly with the further control member (13).

21. (New) The heating unit in accordance with claim 1, wherein progressions of the heating output for affecting the surface temperature with respect to at least one of a size and a length are stored in a memory as a function of one of a manually selected output stage and a type of operating application, and can control and adjust the heating output.

Based Upon: PCT/EP2004/005244

22. (New) The heating unit in accordance with claim 1, wherein the time control circuit (21) is connected with an indicator device (21.1) for a status of at least one of the time control circuit and the device functions.

23. (New) The heating unit in accordance with claim 1, wherein in a parallel branch (17.2) located parallel with a control branch (17.1) of the heating circuit (17) having the at least one control member (12), a higher order safety shut-off device (14) shuts off the heating unit in an event of a dangerous situation.

24. (New) The heating unit in accordance with claim 1, wherein the heating cord is constructed so that a safety shut-off takes place in case of an excess temperature.